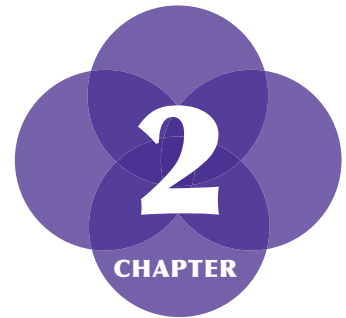


# THE CONTINUOUS SCHOOL IMPROVEMENT FRAMEWORK



*Schools engaged in continuous school improvement clarify whom they have as students, understand where the learning organization is right now on all measures, consider processes as well as results, create visions that make a difference for whom they have as students, help everyone get on the same page with understanding how to achieve the vision, and know if what the learning organization is doing is making a difference.*

*Education for the Future*

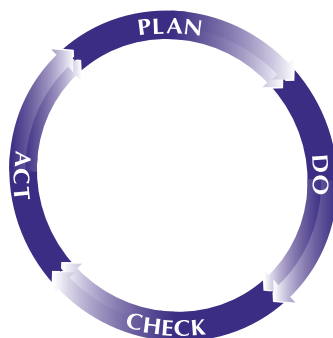
Schools need a framework that is true to the roots of traditional continuous improvement to help them advance their entire systems—a framework to improve teaching for all teachers and learning for all students.

## TRADITIONAL CONTINUOUS IMPROVEMENT

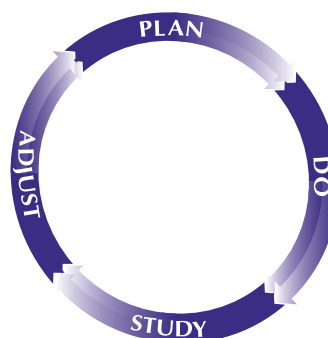
Traditional continuous improvement, made common all over the world by W. Edwards Deming during the twentieth century, starting in 1950, is a four-step plan-do-check-act (PDCA) or plan-do-study-adjust (PDSA) cycle, also known as the Deming Cycle or Shewhart Cycle, that guides organizations through process improvement using the scientific method of hypothesis, experiment, and evaluation. This process improvement approach is credited for taking many organizations from the brink of extinction to high quality production. The PDSA cycle is used by the International Organization for Standardization (ISO) as an approach to developing and improving management systems. Examples are ISO 14000 standards for environmental management systems and ISO 9000 for quality management systems. These continuous improvement standards provide structured approaches to setting objectives, achieving them, and verifying that they have been achieved.

*Schools need a framework that is true to the roots of traditional continuous improvement to help them advance their entire systems—a framework to improve teaching for all teachers and learning for all students.*

## PLAN-DO-CHECK-ACT (PDCA) CYCLE



## PLAN-DO-STUDY-ADJUST (PDSA) CYCLE



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*The Quality Toolbox, Second Edition*  
(Milwaukee: ASQ Quality Press, 2005).  
To order this book, visit ASQ at:  
<http://www.asq.org/quality-press>.

*Plan, Do, Check/Study, Act/Adjust* is defined as follows:

- ◆ **Plan:** Identify an opportunity and plan for change.
- ◆ **Do:** Implement the change.
- ◆ **Check/Study:** Use data to analyze the results of the change and determine whether the process made a difference. (Deming later changed *check* to *study* to deemphasize inspection and to emphasize analysis. PDSA.)
- ◆ **Act/Adjust:** If the change was successful, implement it on a wider scale and continuously assess the results. If the change was not successful, use what you learned, adjust, and begin the cycle again.

## CONTINUOUS SCHOOL IMPROVEMENT

Using the overall philosophy of continuous improvement, continuous school improvement is defined as the process of improving schools on an ongoing basis, as follows:

**Plan**

- ◆ using data to understand where the school is now;
- ◆ understanding how the school is getting its current results;
- ◆ clarifying where the school wants to go, with respect to vision;
- ◆ determining how the school will get to where it wants to go;

**Implement**

- ◆ implementing the processes and structures to take the school where it wants to go;

**Continuous School Improvement —**

- *Plan*
- *Implement*
- *Evaluate*
- *Improve*

## Evaluate

- ◆ evaluating the parts and the whole on an ongoing basis to know if the parts are effective and aligned with where the school wants to go; and

## Improve

- ◆ improving the parts and the whole on an ongoing basis. Use what you learn, adjust, and begin the cycle again.

## THE CONTINUOUS SCHOOL IMPROVEMENT FRAMEWORK

Shifting from the historical to current times, *Education for the Future* created a framework using the concept of Plan-Implement-Evaluate-Improve, to move whole educational systems forward to continuous improvement. The continuous school improvement framework—

1. shows the big picture of continuous school improvement for whole staff understanding and commitment,
2. helps staff understand the components in the context of the conceptual framework, and
3. organizes the information in a way that makes it easy for staff to own, use, and apply.

### The Continuous School Improvement Framework—

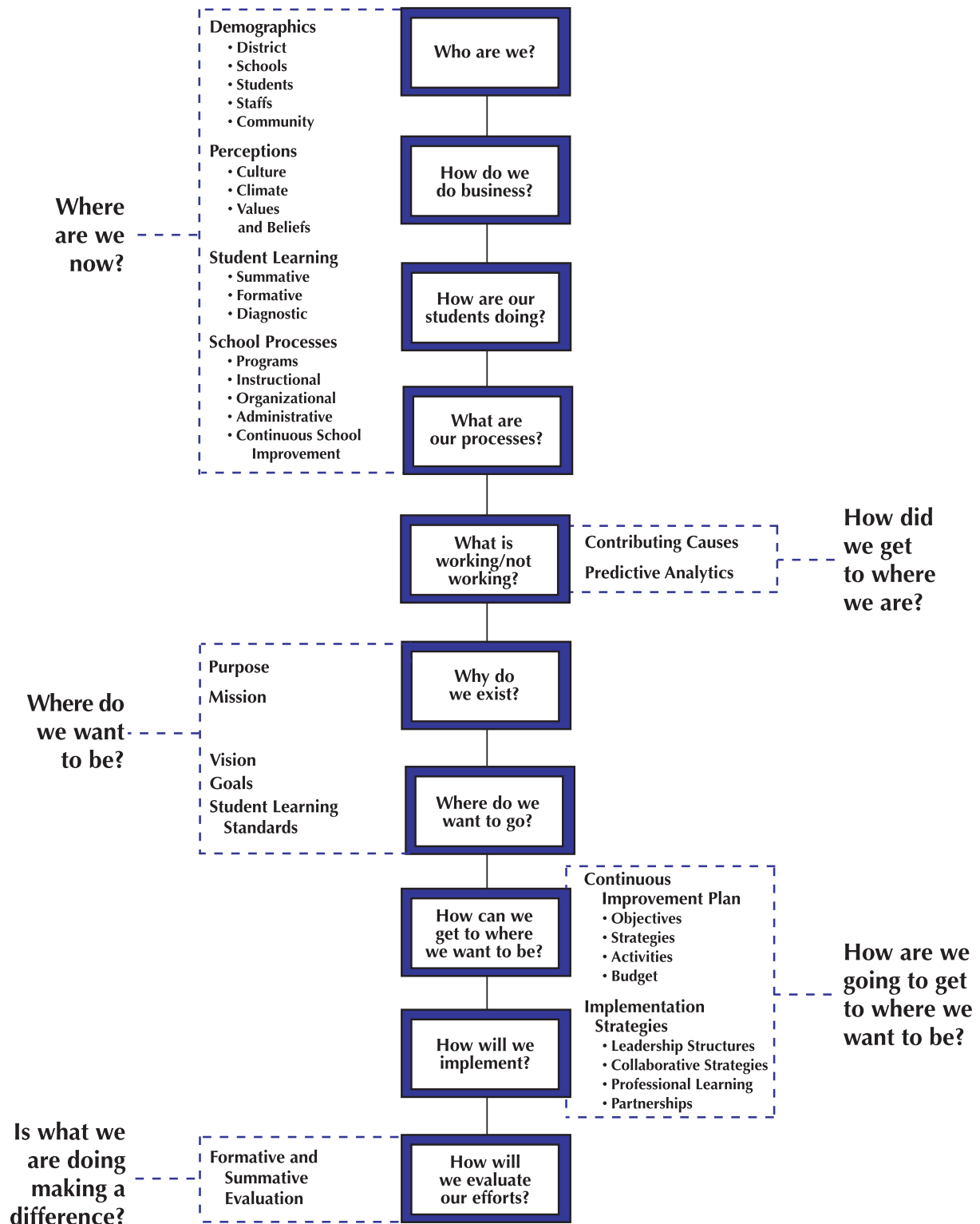
1. *Shows the big picture of continuous school improvement for whole staff understanding and commitment,*
2. *Helps staff understand the components in the context of the conceptual framework, and*
3. *Organizes the information in a way that makes it easy for staff to own, use, and apply.*

Figure 2.1 displays the framework for continuous school improvement, helping schools create a learning organization that will make a difference for all students and all teachers. The framework consists of five simple, logical questions that incorporate continuous improvement principles: Plan, Implement, Evaluate, Improve.

- ◆ *Where are we now?*
- ◆ *How did we get to where we are?*
- ◆ *Where do we want to be?*
- ◆ *How are we going to get to where we want to be?*
- ◆ *Is what we are doing making a difference?*

These questions, or components of the framework, are presented in this chapter, along with why it is important to consider each question and the answers. The chapters and appendices that follow organize the information for easy application, show why each component is important, what it will look like when schools do this work, and how to engage staff members in the work.

**Figure 2.1**  
**CONTINUOUS SCHOOL IMPROVEMENT FRAMEWORK**

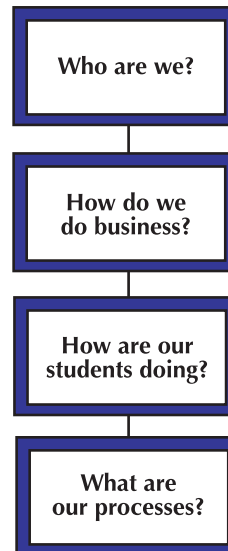


## Where Are We Now?

Knowing where a school is now is the part of planning for continuous school improvement that requires a comprehensive and honest look at *all* the school's data—not just student learning results. Looking at multiple measures of data can help staff answer the four sub-questions of *Where are we now?*

- ◆ *Who are we?*
  - ◆ *How do we do business?*
  - ◆ *How are our students doing? and*
  - ◆ *What are our processes?*
- ◆ *Who are we?* is answered through analysis of longitudinal demographic data. The current year's data can help staff see whom they have as students, and how the students are matched to whom they have as staff. The longitudinal analysis can help staff know how their populations have changed, and clarify what staff need to learn to meet the needs of whom they have as students. In demographic data, staff can see the system and leadership philosophies. Chapter 3 describes what demographic data are important, and how to report and analyze these data for continuous school improvement.
- ◆ *How do we do business?* is mostly answered through perceptions and organizational assessments which inform staff about how the learning environment is set up for student and teacher success. Culture and climate, which reflect how the learning organization does business, help create the results the school is getting. Looking over time, staff can see progress is being made when culture and climate are improved. Chapter 4 explains the importance and uses of perceptual data in continuous school improvement.
- ◆ *How are our students doing?* is answered through instruction-infused and formative and summative assessments, and helps staff know that students are learning what they are being taught. Over time, teachers can see individual student, teacher-classroom, grade, and school-level growth. Chapter 5 provides details for inventorying and analyzing student learning data for continuous school improvement.
- ◆ *What are our processes?* is answered through listing and analyzing programs and processes and shows what staff are doing to get the results they are getting. After listing the school's processes and programs, it is important to describe each process and program's purpose, outcomes,

### Where are we now?



*Knowing where a school is now is the part of planning for continuous school improvement that requires a comprehensive and honest look at all the school's data—not just student learning results.*

### Answering the four sub-questions of *Where are we now?*

- *Who are we?* is answered through analysis of longitudinal demographic data.
- *How do we do business?* is mostly answered through perceptions and organizational assessments.
- *How are our students doing?* is answered through instruction-infused and formative and summative assessments.
- *What are our processes?* is answered through listing and analyzing programs and processes.

*If you took all the data needed to answer the questions above, they would fall into four major categories of demographics, perceptions, student learning, and school processes.*

intended participants, how they are to be implemented, how implementation is being measured, and the results. If programs cannot be described and their implementation spelled out, faculties cannot implement them with *integrity* (i.e., the adherence to the intent and purpose) and *fidelity* (i.e., the delivery of content and instructional strategies in the way in which they were designed and intended to be delivered—accurately and consistently). Chapter 6 focuses on listing and measuring school processes.

If you took all the data needed to answer the questions above, they would fall into four major categories of demographics, perceptions, student learning, and school processes. Figure 2.2 shows these four categories of data as overlapping circles. This figure illustrates the different types of information one can gain from each data type, with one year of data and over time, and the enhanced levels of analyses that can be gained from the intersections of the measures. Intersections of the four data categories are described in Chapter 8.

*Looking across the four types of data allows schools to see what they are doing to get the results they are getting now, what is working, what is not working, and how data elements relate to each other to impact results.*

### How Did We Get to Where We Are?

One measure, by itself, gives useful information. Looking across the four types of data allows schools to see what they are doing to get the results they are getting now, what is working, what is not working, and how data elements relate to each other to impact results. These analyses become comprehensive needs assessments, inform planning and visioning, and provide the data needed for evaluation. Chapter 7 details how school staff can analyze and use this comprehensive data analysis to inform a vision and create a plan for continuous school improvement. Chapter 8 shows how to go deeper into the data to understand contributing causes of undesirable results and how to predict and ensure success.

**How did we get to where we are?**

What is working/not working?

It is particularly important to know how the school is getting its current results in all areas, so processes that are achieving the school's desired results are repeated, and those not making a difference can be eliminated.

*Without a shared vision to which all staff members commit, a school's collective efforts have no target.*

### Where Do We Want to Be?

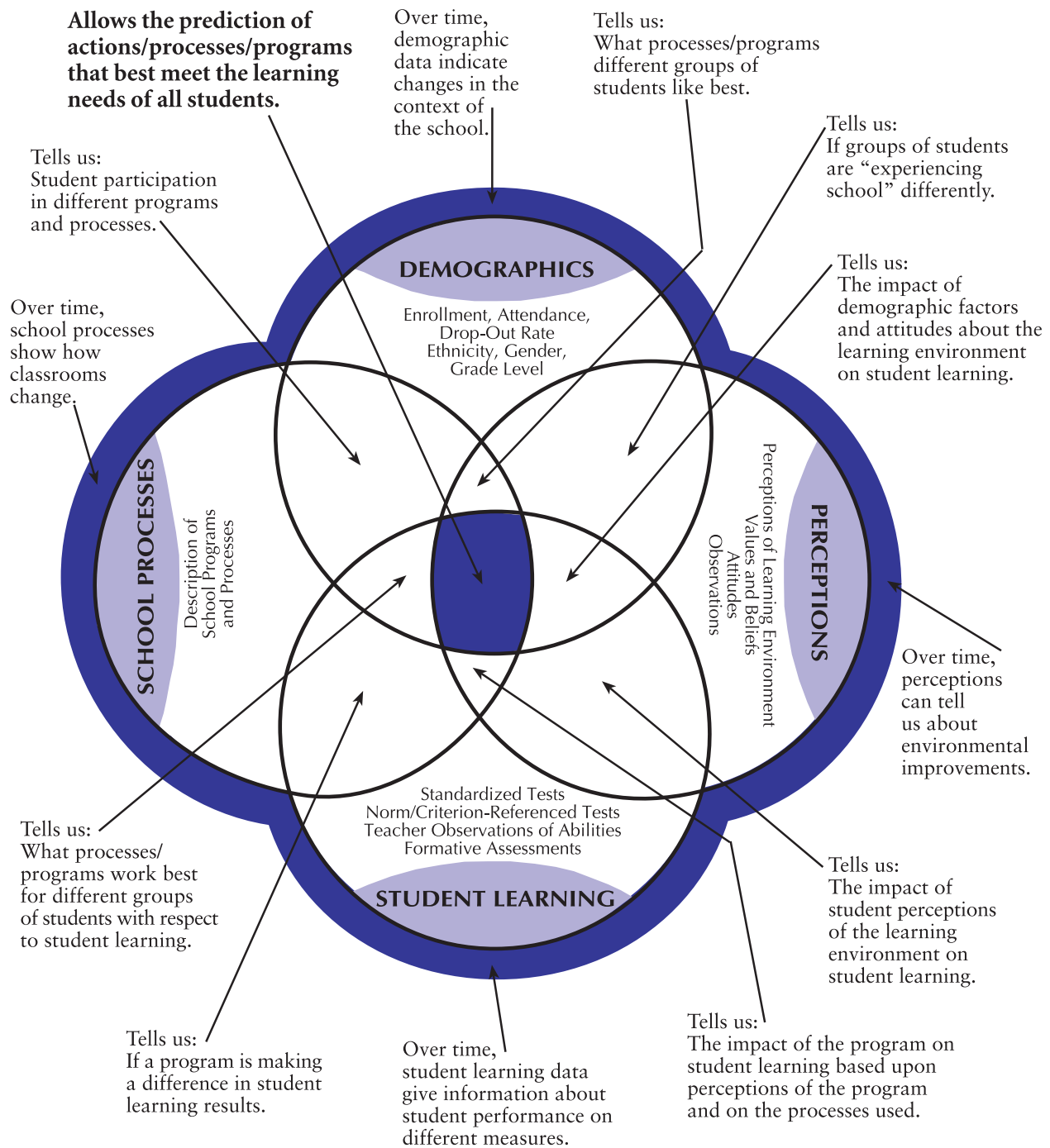
A school defines its purpose through its mission, vision, goals, and objectives. The school's mission, vision, and goals must be created from the core values and beliefs of the staff. Creating a vision from core values and beliefs ensures a vision that all staff members can share and to which they can and will commit. Without a shared vision to which all staff members commit, a school's collective efforts have no

**Where do we want to be?**

Why do we exist?

Where do we want to go?

**Figure 2.2**  
**MULTIPLE MEASURES OF DATA**





*The answer to “How are we going to get to where we want to be?” is key to unlocking how the vision will be implemented and how results will be optimized.*

*Leadership structures, professional learning with structured collaboration to share data, and partnership involvement are key elements for ensuring staff commitment to the implementation of the shared vision.*

*Evaluation and reflective learning are required to assess the effectiveness of all school programs and processes, the alignment of all parts of the system to the vision, and to determine if what a school is doing is making a difference for students on an ongoing basis.*

target. A truly shared vision becomes the target for all that happens in the school. Chapter 9 specifies how to create and monitor the implementation of a shared vision.

## How Are We Going to Get to Where We Want to Be?

The answer to *How are we going to get to where we want to be?* is key to unlocking how the vision will be implemented and how results will be optimized. A continuous school improvement plan consisting of goals, objectives, strategies, activities, measurement of strategies and activities, person(s) responsible, due dates, timelines, and required resources, needs to be developed to implement and achieve the vision and goals, to eliminate the contributing causes of undesirable results, and to optimize results.

Leadership structures, professional learning with structured collaboration to share data, and partnership involvement are key elements for ensuring staff commitment to the implementation of the shared vision. Continuous school improvement plans must include how and when decisions will be made, identify professional learning and collaboration required to gain new skills and knowledge, and clarify how working with partners will help with achieving the vision. Chapter 10 describes how to create a continuous school improvement plan, complete with the leadership, professional learning, and partnership structures that will ensure the implementation of the vision and plan. Chapter 11 focuses on utilizing strategies to support educator collaboration for data use that will lead to improved teaching and learning.

**How are we going to get to where we want to be?**

How can we get to where we want to be?

How will we implement?

## Is What We Are Doing Making a Difference?

Evaluation and reflective learning are required to assess the effectiveness of all school programs and processes, the alignment of all parts of the system to the vision, and to determine if what a school is doing is making a difference for students on an ongoing basis. Evaluations at the end of the year allow reflection on all the parts of the system, the alignment of the parts to the whole, and the appraisal of whether or not the school made the difference as expected. Chapter 12 reviews the different types of evaluation most needed in continuous school improvement, and how to best accomplish them.

**Is what we are doing making a difference?**

How will we evaluate our efforts?



## Continuous School Improvement Cycle

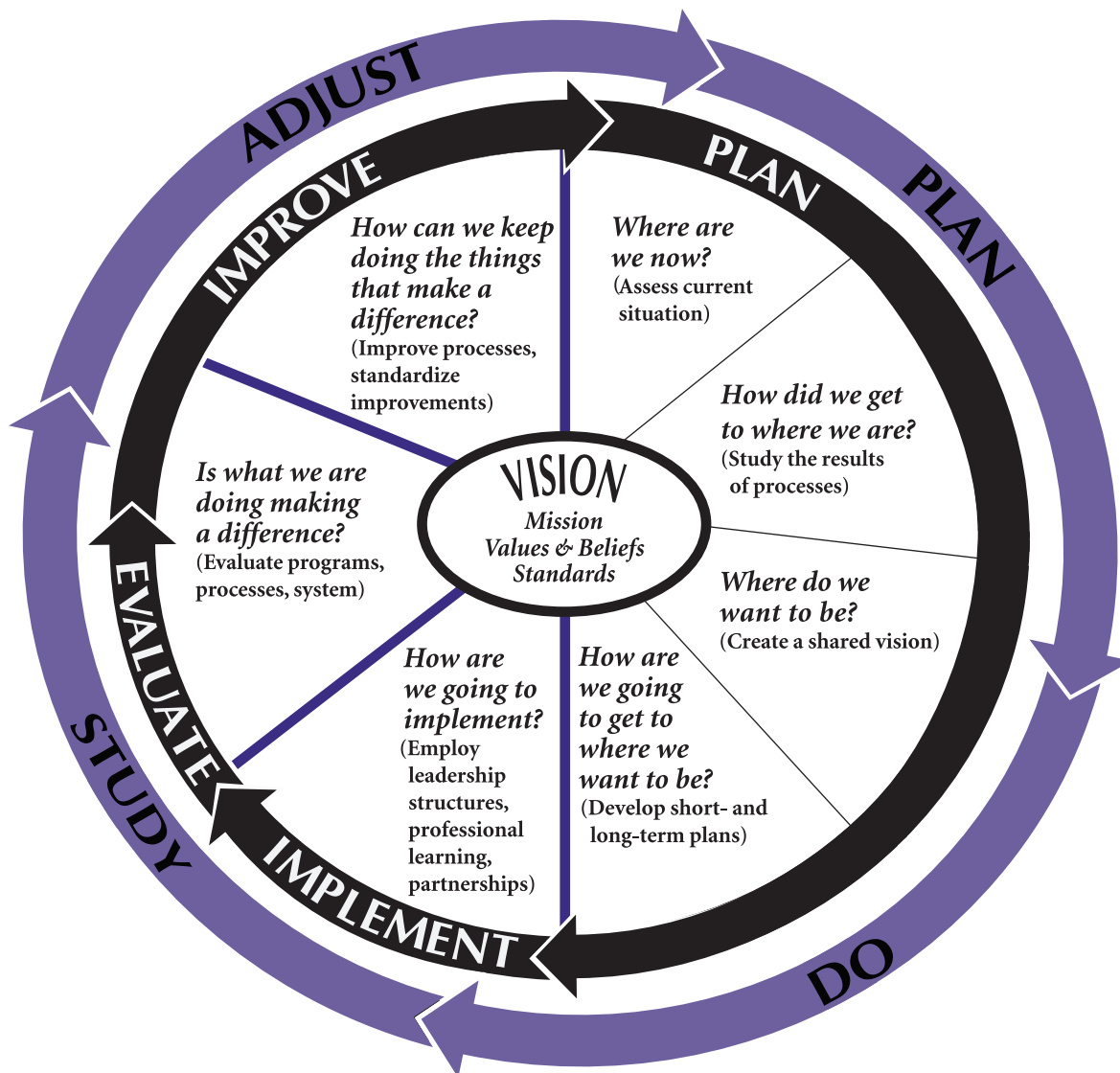
Figure 2.3 shows the continuous school improvement framework questions in the traditional PDSA cycle, with contemporary and school-focused terms, plan-implement-evaluate-improve, and vision located at the center. The questions fall into the cycle as follows:

With continuous school improvement, the vision is the target of everything that is done in the school. Schools **PLAN** to implement the vision by determining—

- ◆ *Where they are now*, through comprehensive data analysis;
- ◆ *How they got to where they are right now*, through deeper study of the results of current processes;

*With continuous school improvement, the vision is the target of everything that is done in the school.*

**Figure 2.3**  
**CONTINUOUS SCHOOL IMPROVEMENT CYCLE**



- ◆ *Where they want to be*, by creating or revisiting the vision and placing it at the center of everything they do; and
- ◆ *How they are going to get to the vision*, through short-term and long-term plans.

Note that the elements of Plan-Do-Study-Adjust (PDSA) are not equally distributed in reality. PLANNING takes up half of the cycle—more than the traditional cycle implies. There is a lot to do before implementation can begin.

Schools IMPLEMENT the vision using leadership structures, professional learning, and partnerships. They EVALUATE programs, processes, and the vision to know if what they are doing is making a difference. Then, they adjust and IMPROVE by continuing to do the things that are making a difference and stop doing the things that are not making a difference. And the cycle repeats.

*By starting and ending with the gaps, schools miss the opportunities to innovate, rethink, and improve their systems.*

*By starting with comprehensive data analysis, schools see how they are getting their current results.*

*The Education for the Future Continuous Improvement Continuums (CICs) appear in Appendix A with complete instructions on how to use them, and help school staff know where their learning organizations are and what they need to do next with respect to continuous school improvement.*

## FROM COMPLIANCE TO CONTINUOUS SCHOOL IMPROVEMENT

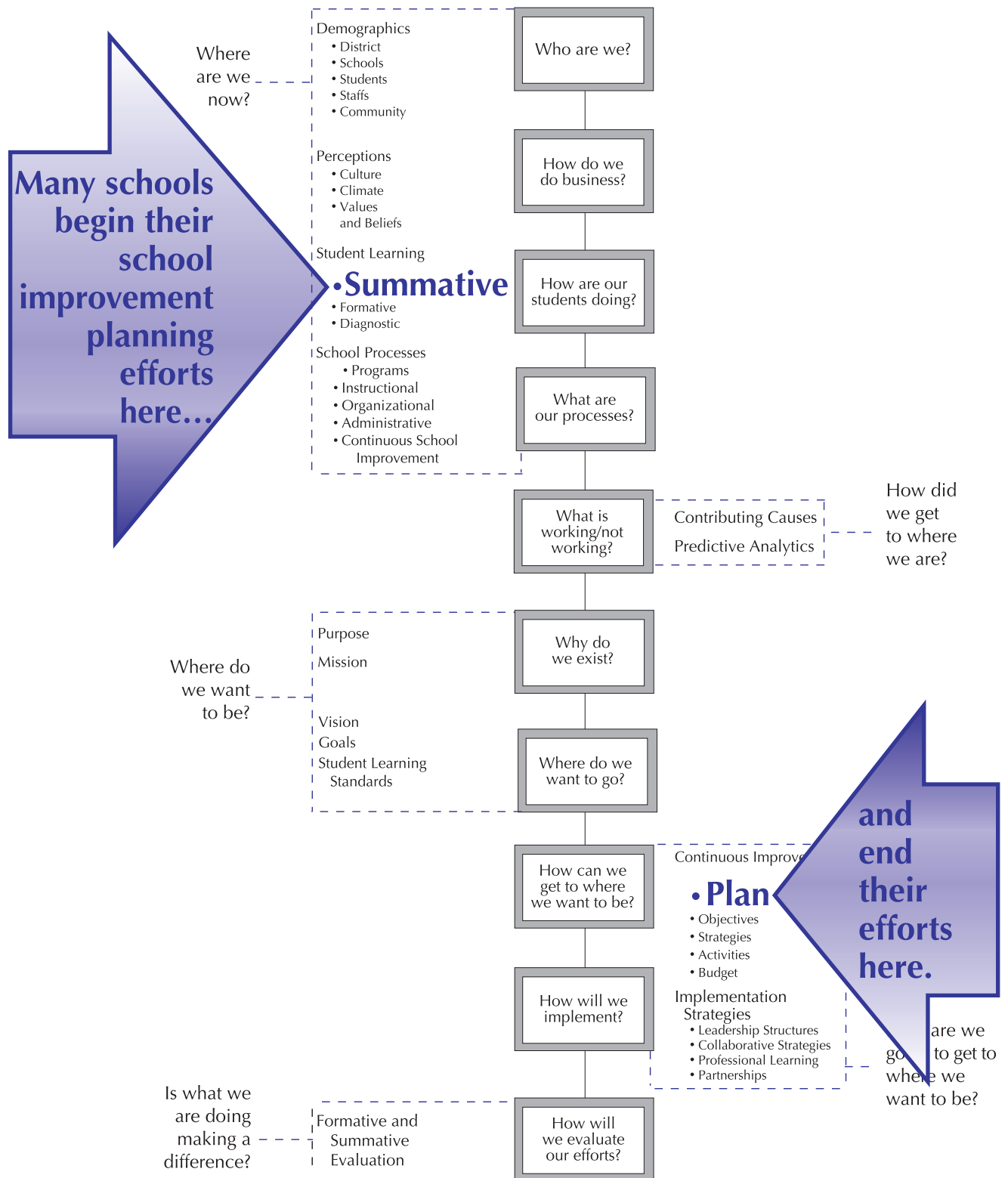
The framework for continuous school improvement shown in Figure 2.1 sounds so simple and logical, most schools think they are already doing it. However, many schools skip the first three components of the continuous school improvement framework and begin their school improvement plans by looking at the gaps between where they are now and where they want to be with respect to summative student learning results, only. While these data provide valuable information, starting here does not give schools a complete picture. By starting and ending with the gaps, schools miss the opportunities to innovate, rethink, and improve their systems. By starting and ending with the summative testing gaps, schools tend to add interventions to “fix the kids.” By starting with comprehensive data analysis, schools see how they are getting their current results. Then, with their vision, they can determine what *they* need to do to get different results for *all* students.

Figure 2.4 repeats the framework for continuous school improvement (previously seen in Figure 2.1), pointing out where schools too often begin and end their school improvement efforts. This is what complying to solely close gaps looks like.

## ASSESSING CONTINUOUS SCHOOL IMPROVEMENT WITH THE EDUCATION FOR THE FUTURE CONTINUOUS IMPROVEMENT CONTINUUMS

A tool we use to help schools reflect on where they are with continuous school improvement are the *Education for the Future Continuous Improvement Continuums* (CICs). Appearing in Appendix A, with complete instructions on how to use them, the *Continuums* help school staff know where their learning organizations are and what they need to do next with respect to continuous school improvement. The

**Figure 2.4**  
**CONTINUOUS SCHOOL IMPROVEMENT FRAMEWORK—WITH FOCUS ON COMPLIANCE**



*Continuous Improvement Continuums*, adapted from the *Malcolm Baldrige Award Program for Quality Business Management*, provide an authentic means for measuring schoolwide improvement and growth. Schools use these Continuums as a vehicle for ongoing self-assessment. They use the results of the assessment to acknowledge their accomplishments, to set goals for improvement, and to keep school districts and partners apprised of the progress they have made in their continuous school improvement efforts.

The *Continuous Improvement Continuums* are self-assessment tools that measure, on a one-to-five scale, where the school is with respect to its *approach*, *implementation*, and *outcome* for seven continuous improvement categories that are congruent with the components of the continuous school improvement framework. Those seven categories are Information and Analysis, Student Achievement, Quality Planning, Professional Learning, Leadership, Partnership Development, and Continuous Improvement and Evaluation.

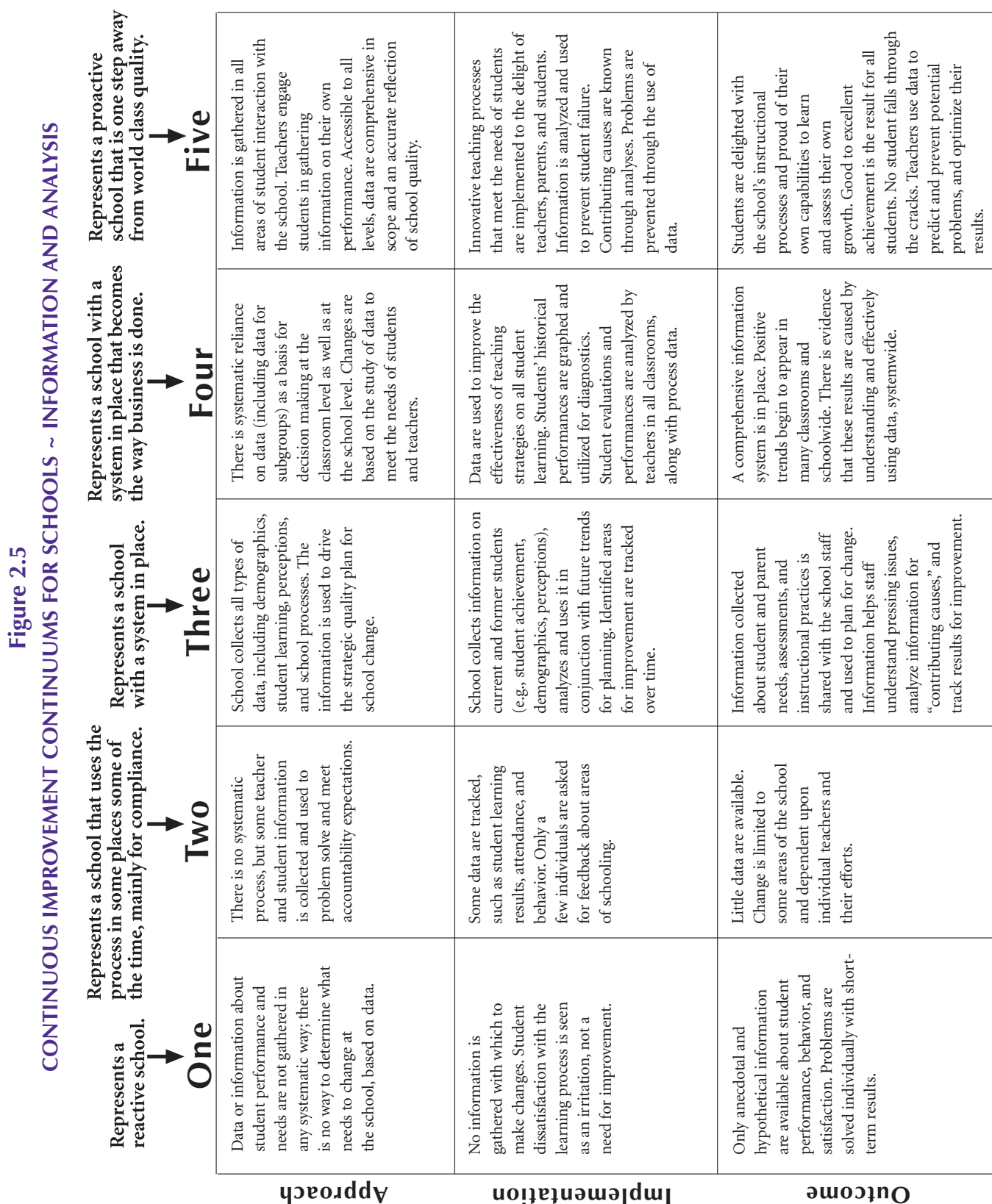
Figure 2.5 shows the first in the series of seven, *Information and Analysis Continuum*, with descriptions of each of the five levels, summarized below.

- ◆ A “one” rating, located at the left of each *Continuum*, represents a school that has not yet begun to improve. Decisions are reactive.
- ◆ A “two” rating implies that there are some good things going on in some places in the school, some of the time. Decisions are usually made on a problem-solving basis—when they are required.
- ◆ A “three” rating indicates that there is a system in place to do the work of the *Continuum*. There is also a system for making decisions.
- ◆ At a “four” level, schools have a system in place, everyone knows it, and it becomes the way business is done and decisions are made.
- ◆ “Five”, located at the right of each *Continuum*, represents a school that is one step removed from “world class quality.” The school knows how it gets its best results, which is optimized throughout the system. All decisions are proactive.

**The seven *Continuous Improvement Continuums* categories are—**

- *Information and Analysis*
- *Student Achievement*
- *Quality Planning*
- *Professional Learning*
- *Leadership*
- *Partnership Development*
- *Continuous Improvement and Evaluation*

The elements from one to five describe how that *Continuum* is hypothesized to evolve in a continuously improving school. Each *Continuum* moves from a reactive mode to a proactive mode—from fire fighting to prevention. The five in Approach, Implementation, and Outcome in each *Continuum* is the target. Vertically, the Approach, Implementation, and Outcome statements, for any number one through five, are hypotheses. In other words, the implementation statement describes how



*Measuring a school's progress against identified criteria—such as the Education for the Future Continuous Improvement Continuums—provides a benchmark that schools can use to see if their actions have created the results they intended.*

the approach might look when implemented, and the outcome is the “pay-off” for implementing the approach. If the hypotheses are accurate, the outcome will not be realized until the approach is actually implemented.

Measuring a school's progress against identified criteria—such as the *Education for the Future Continuous Improvement Continuums*—provides a benchmark that schools can use to see if their actions have created the results they intended. These measures are supported by analyzing data gathered through questionnaires, performance measures, and observations of the learning environment. When these measures are used on a regular basis, the results clearly document trends and provide information that assists schools in determining next steps for improvement.

## ASSESSING ON THE CONTINUOUS IMPROVEMENT CONTINUUMS

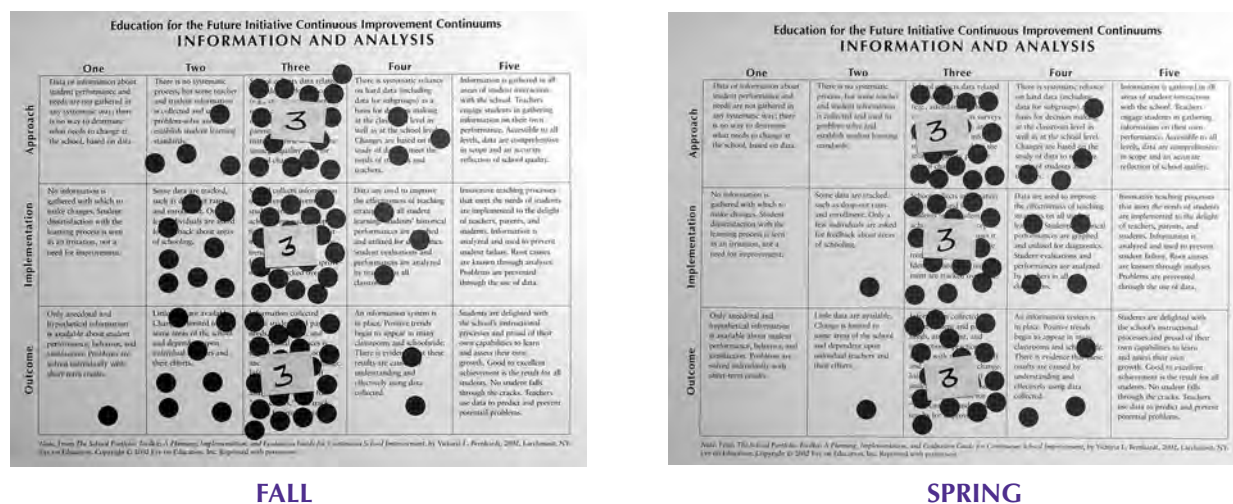
In a whole-staff meeting, the facilitator (preferably not the principal, so she/he can participate in the discussion) introduces a *Continuum*, such as *Information and Analysis*, shown as Figure 2.5. Each staff member independently reads the *Continuum* from left to right, from a one and to a five, and identifies where she/he believes the school is right now, with respect to Approach, Implementation, and Outcome. Staff members place a colorful dot on the *Continuum* (enlarged and placed on the wall before staff arrived at the meeting) where they believe the *school* is with respect to Approach, Implementation, and Outcome. After everyone has placed her or his dot on the poster, staff discusses why they thought the school was a one, two, three, four, or five. After coming to consensus, staff members discuss what they need to do to move up in the *Continuum*, and the facilitator records next steps. They continue through the seven *Continuous Improvement Continuums*. By the time they have finished, it is clear to everyone in the school where they are as an organization and what they must do to improve.

Figure 2.6 shows the *Information and Analysis Continuum* completed by a staff in the Fall, on the left, and in the Spring, on the right. In the Fall, staff members felt they were somewhere between a two and a four most of the time—a school that has not been collaborating well. Some staff members believe data are only used when they have to, while others believe they use data all the time. The interesting part is to consider which dots represent the staff members who actually write the school improvement plan. Yes; they are the fours. They wonder why their plans are not implemented! After clarifying what they have for data and how they really do use data, they discuss next steps, and implement them.

Staff assessed again in the Spring. This time, as the picture on the right shows, they moved almost all the twos to at least threes. In other words, they picked up a portion of their staff and got them on the same page. With clarity of what they are really doing and what they need to do, the whole school can move ahead.



**Figure 2.6**  
**EXAMPLE OF CONTINUOUS IMPROVEMENT CONTINUUM ASSESSMENT, FALL AND SPRING**



Assessing on the *Continuous Improvement Continuums* is a powerful way to find out what staff are believing, and therefore, acting on, with respect to the components of continuous school improvement. This assessment will show clearly why the school is getting its current results. By understanding staff preconceptions, we have a way to engage staff members, and bring them forward together. The discussion will automatically lead staff to what they need to do to get different results. Schools need only to assess once a year, although many schools choose to assess twice the first year.

Schools use these *Continuums* annually as a vehicle for ongoing self-assessment. School staffs use the assessments to renew staff commitment to continuous school improvement. They use the results of the assessments to—

- ◆ find out where they really are, as a staff;
- ◆ acknowledge their accomplishments;
- ◆ get all staff on the same page;
- ◆ set goals for improvement; and
- ◆ keep school districts and partners apprised of the progress they have made in their continuous school improvement efforts.

*Assessing on the Continuous Improvement Continuums is a powerful way to find out what staff are believing, and therefore, acting upon, with respect to the components of continuous school improvement.*



### HOW MUCH TIME DOES IT TAKE?

Providing staff with an overview of the continuous school improvement framework, assessing on the *Education for the Future Continuous Improvement Continuums*, and discussing next steps will take about three hours.

### REFLECTION QUESTIONS

1. What is continuous school improvement?
2. Why is it important to have a framework for continuous school improvement?
3. What are the five essential questions of continuous school improvement?

### APPLICATION OPPORTUNITIES

1. Provide an overview of the *Continuous School Improvement Framework* for staff.
2. As you review the *Continuous School Improvement Framework* (Figure 2.1), determine which components are missing from your school's continuous school improvement efforts.
3. Conduct an assessment on the *Continuous Improvement Continuums* (Appendix A) to find out where staff believe your school is right now and to determine what has to happen next to improve.